BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

BYATARAYANAPURA DIVISION

KODIGEHALLI SUB DIVISION

Name of the Work : Replace of Old UGD pipeline at Kodigehalli in ward No.08

Eatimated Cost : 15.00 Lakhs

Job Code : 008-19-000020

BRUHAT BANGALORE MAHANAGARA PALIKE

Name of Work : Replace of Old UGD pipeline at Kodigehalli in ward No.08

Job Code:- 008-19-000020

Estimate Cost: =15.0Lakh

Sl. No	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
1	KSRRB M200-12.2. Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts complete as per specifications. i) Lime /Cement Concrete. I. By Manual Means :B. Cement Concrete Grade M-15 & M-20. MORTH Specification No. 202. (P.No. 139, I.No. 18.18 of CSR 2018-19)								
	Sanitary work	Cum							
	1st cross Road @ Ram Mandhir		1	75.00	0.90	0.25	16.88		
	2nd cross Road @ Ram Mandhir		1	120.00	0.90	0.25	27.00		
							43.88	699.42	**30687.05**
	Basic rate	**557.00**							
	Loading and unloading with 20km lead (as per SR-2018-19)= 57+2.0x1.3x20	**109.00**							
	Area Weightage 6%	**33.42**							
	Sub Total	**699.42**							
	Total	**699.42**							
2	EXCAVATING FOR PIPE LINE TRENCHES OF REQUIRED WIDTH by mechanical / & manual means including dressing sides, ramming of bottoms, providing barricading, danger lighting, shoring,strutting, dewatering, etc. IN ALL KINDS OF SOIL MIXED WITH BOULDERS of 30 cms size, etc. for: **Pipes of all dia. for depth upto 2.0 M in all types of soils(BWSSB SR 17-18, P.51, I No.1.1)**								
	Sanitary work	Cum							
	1st cross Road @ Ram Mandhir		1	75.00	0.90	1.20	81.00		
	2nd cross Road @ Ram Mandhir		1	120.00	0.90	1.20	129.60		
	deduct Manhole Qty		-7	1.20	0.90	2.00	-15.12		
							195.48	167.00	**32645.16**
3	Supplying, lowering, laying, jointing, testing and commissioning of Glazed Stone Ware Pipes of following dia, conforming to IS 651:1992,IS 4127 with latest amendments, including conveying to work site, caulking with hemp dipped in tar and jointing with CM 1:1.5 using OPC, perfect linking and curing for 10 days and testing with water etc. with all lead, lifts and as per Technical Specifications. The cost to include the cost of all jointing materials, necessary survey works for laying of sewer lines etc. complete. The contractor will make own arrangements for procuring water for testing. **230 mm dia. pipes(BWSSB SR 17-18, P.157 I.No 3.4)**								
	Sanitary work	m							
	1st cross Road @ Ram Mandhir		1	75.00			75.00		
	2nd cross Road @ Ram Mandhir		1	120.00			120.00		
	deduct Manhole Qty		-7	1.20			-7.80		
							187.20	523.00	**97905.60**
4	Labour charges for laying and jointing glazed stone ware pipes of 0.6m length and of specified dia., of tested quality conforming to IS 651 of 1965 including caulking with hemp yarn, jointing with CM 1:2 and testing with water etc. complete for: (Rate to include cost of jointing materials and transportation of pipes from store work site but excluding the cost of earth work) - **Glazed Stone Ware pipe of 230 mm dia (P.No 159 I .No.7.3 BWSSB 2017-18)**								
	Sanitary work	Rmt							
	1st cross Road @ Ram Mandhir		1	75.00			75.00		
	2nd cross Road @ Ram Mandhir		1	120.00			120.00		
	deduct Manhole Qty		-7	1.20			-7.80		
							187.20	108.00	**20217.60**

S. No	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
5	Providing house connection with excavation in all types of soils without damaging the other utilities and supplying and laying 25 mm OD MDPE pipe (PE80) manufactured in accordance with ISO 4427 - 1996 with minimum required strength of 8 Mpa, hydraulic design stress of 6.3 Mpa and with minimum wall thickness of 2.3 mm by making the bore of 15 mm dia. size on the Board's supply mains of 100 mm dia. using drilling bits or machines only and laying the pipe line at a depth not less than 0.45 mtrs. from the road surface, including providing 40 mm dia. "A" class GI pipe as casing over the MDPE pipe from the bore point and upto the entrance of the premises and removing the stone slab covering of the drain and dismantling the size stone masonry wherever necessary and making bore in the wall of the premises. On entering the premises, connection should be continued with 20 mm GI pipe by making "U" shape for the meter point below the ground level by making pit with sufficient space for the easy installation and removal of the water meter and providing vertical stand pipes on both sides of the mater. The connection should be secured firmly on the Board's main pipe with SS / Brass . ferrule of size 1/2" x 3/4" and fixing the union joint and gate valve / stop cock before the meter point and a reflex valve / non-return valve should be fixed on the connection after the meter point. (All these fixtures should be of standard quality conforming to IS). The compression fittings for MDPE pipes conforming to ISO 14236 and its latest versions. The excavated trench should be refilled with soft selected earth and the dismantled masonry of the drain should be re-constructed with available size stones in CM 1:8 and providing coping in CC 1:3:6 wherever required and the stone slab covering should be refixed in position with pointing in CM 1:3 and also the bored wall of the premises should be re-done to the original position and the rates are inclusive of the cost of all the materials, cement, sand water etc., required for these works. The road suface should be compacted well and brought to the original condition and the excess earth or debris should be disposed off to a distance with an initial lead of 10 Kms. etc. complete for: **For minimum length of 2.0 mtrs.(BWSSB SR 2017-18, P-68 I-53.1)**								
	house connection	Nos	50.00				**50.00**		
							50.00	3560.00	**178000.00**
6	Refilling pipeline and foundation with selected trenches available earth form trench excavation and foundation inlcuding 5 watering, consolidation in layers of 15cms., thickness including disposing off the surplus earth with all leads & lifts. **(BwsSB SR 2016-17, P-9 I-2)**								
	Sanitary work	Cum							
	Qty Same as 2						195.48		
	Deductions								
	Ded Pipe Volume						-13.79		
	WMM						-25.19		
	GSB						-33.59		
							122.92	62.00	**7620.76**
7	KSRRB M400-6.1 : Construction of granular sub-base by providing close graded cushed stone aggregates of granite / trap / basalt material, mixing in a mechanical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications. A. Plant Mix Method For Grading-II Material (BwsSB SR 2016-17, P-280 I-20.4)								
	Sanitary work	Cum							
	1st cross Road @ Ram Mandhir		1	75.00	0.90	0.15	10.13		
	2nd cross Road @ Ram Mandhir		1	120.00	0.90	0.15	16.20		
	deduct Manhole Qty		-7	1.20	0.90	0.15	-1.13		
							25.19	1,571.00	**39575.06**
8	Wet Mix Macadam, Providing.laying, spreading and compacting cushed stone aggregates of granite trap/basalt to wet mis macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of 4 mixed method of tipper to site, laying in uniform layers with paver in sub-base base course on well prepared surface and compacting with bratory roller to achieve the desired density complete as per specifications MORTH Specification No. 406 **(BwssB SR 2016-17)**								
	Sanitary work	Cum							
	1st cross Road @ Ram Mandhir		1	75.00	0.90	0.20	13.50		
	2nd cross Road @ Ram Mandhir		1	120.00	0.90	0.20	21.60		
	deduct Manhole Qty		-7	1.20	0.90	0.20	-1.51		
							33.59	1,668.00	**56024.78**

S. No	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
9	Dismantling the damaged or collapsed manhole of 4" dia conical in shape and reconstructing the same with machine made wire 6 brick in CM (1:4) as per design and specification of new cut manhole 4" dia with old frame and cover excluding bed concrete 13.6 (RwssR SR 2016-17, P-97, I-92 MTR DEPTH								
	1mt Depth Manhole	Nos							
	Manhole raising		10						
							10.00		
							10.00	7,358.00	**73580.00**
10	Providing and constructing "wire cut brick manhole chambers" using sulphate resistant cement, conical in shape at top with C.C. 1:3:6 foundation using 40 mm and down size graded metal of approved quality and with an offset of 0.15 m alround the chamber and brick masonry in C.M. 1:4 plaster with wire cut bricks of approved quality and CM plaster 1:3 proportion 12 mm thick inside and outside except for the conical surface outside where the thickness of plaster shall be 20 mm thick, with 1:6 slope in the concrete towards the central drain, finished smooth and fixing of pipes in CC 1:2:4 graded metal of 20 mm and down size including conveying to work spot supplying & fixing SFRC manhole frame and cover confirming to IS:12592 with latest amendments in CC 1:2:4, supplying and fixing of minimum 3 mm thick encapsulated plastic footsteps (as per IS 10910) on 12 mm dia, Grade Fe-415 steel bar (as per IS 1786) staggered at 30 cms apart as detailed in Technical Specifications and as directed, watering, curring, barricading, danger lighting, pouring tar over MH frame and cover, cost of tar, shoring, strutting, dewatering, engraving manhole No. with flow irection on the inner conical surface etc., as per the drawing with wire cut bricks as per technical pecifications for the following diameters & depths by using Ordinary Port Land Cement. (inclusive of earthwork for all types of soil) (BwsSB SR 2017-18, P-80 I-83)								
	1.2 m diameter manholes	Nos							
	For 1.0 m depth		1				**1.00**	15,704.00	**15704.00**
	For 1.5 m depth		7				**7.00**	21,479.00	**150353.00**
	For 3 m depth		2				**2.00**	41,745.00	**83490.00**
11	Disposong off the excess excavated earth of all type up to a distance mentioned Every Km beyond 5 KM 8 Considering 10 Km below by vehicle including loading unloading with all lifts labour HOM of machinery etc., complete (BWSSB SR 2016-17, Pg-10, Item-7)								
	Qty Same as Item No.02		Cum				195.48		
	Qty Same as Item No.06						-122.92		
							72.56	147.00	**10666.99**
12	Hire Charges for 2HP dewatering pump to bail out water at leaking pits inclusive of hire charges etc, complete Rs.1300/- per day of 8hours shift per day (BWSSB SR 16-17 Sl.No-4, P-34)								
		Days					15.00		
							15.00	1,300.00	**19500.00**
13	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum) Item No 22.6.1								
	Basic rate	**4916.00**							
	6.00% AW	**294.96**							

TECHNICAL SANCTION
Accorded For Rs. (Lakhs) 15.00 Lakhs only
Head of Work ... P-3295
Div. Ref. No. ... Date 01/02/19
AE
EE(BTP)

Sl. No	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
	Sub Total	**5210.96**							
	1st cross Road @ Ram Mandhir	Cum	1.00	75.00	4.50	0.15	**50.63**		
	2nd cross Road @ Ram Mandhir	Cum	1.00	120.00	3.65	0.15	**65.70**		
							116.33	5,210.96	**606164.92**
14								**A= Sub Total Cost of KPWD SR items**	**636851.97**
15								**B =Total Construction Cost**	**1422134.93**
16								**C= (A*12% GST)**	**76422.24**
								Sub Total	**1498557.16**
##								**Miscellaneous and rounding off**	**1442.84**
								Total	**1500000.00**

Certificate.

1 *The workspot was inspected and work is found to be necessary.*
2 *The area comes within the Bruhat Bangalore Mahanagara Palike limits.*
3 *The rates adopted based on the BWSSB SR 2016-17, BWSSB SR 2017-18 and PWD SR, Bangalore circle for year 2016-17.*
4 *The provisions made in the estimate are necessary and essential.*

Assistant Engineer

Executive Engineer

Assistant Executive Engineer

Administrative Approval
Accorded for ..1500 Lakhs
Head of A/C..P5295.....
CER NO :.....26..... Dt:..9/01/19

TA

CE (YNK)

BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

BYATARAYANAPURA DIVISION

KODIGEHALLI SUB DIVISION

Name of the Work :- Suppy of Water through Water Tanker at Kodigehalli, Maruthinagar & B.B Nagar Area in Kodigehalli in Ward No 8.

Eatimated Cost : 5.00 Lakhs

Job Code : 008-19-000018

BRUHAT BANGALORE MAHANAGARA PALIKE

Name of Work : Suppy of Water through Water Tanker at Kodigehalli, Maruthinagar & B.B Nagar Area in Kodigehalli in Ward No 8.

			JOB CODE				008-19-000018		
			Estimate Cost:				500000.00		
Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
a	Supply of Drinking Water through water tankers of Capacity 6000 Liters Hiring of Water Tanker (Page No. XLVIII, Code No. 1032) PWD SR 2018-2019 For 3000 Liter Capacity = 412/2 = 206	per day	1				1	206.00	206.00
b	2) Hiring of Tractor 40HP P XXXXVI / I No. 19, Code No 1023, PWD SR 2018-2019	per day	1				1	1288.00	1288.00
c	**Water 40.00 / KL (S.L No 745, Code No 0818).** For 6KL= 6X40=240 Procurement of Water -- Rs. 240.00/ Load (6000 Liters). Considering 3000 Liters cost is =240/2 Rs.120.00/Load Considering 5 Loads/Day 6X120.00=720	Per Load	6				6	120.00	720.00
d	Engaging Causal Labours (Unskilled mazdoor Heavy) (PWD SR 2018-2019 Page No. LIV / I. 5)		1				1	446.20	446.20
	Subtotal for 6 loads								2660.20
1	Consider 6 Loads / Day for 167 Days 6 X 165 = 1002 Loads x Rs. 443.37 = For 1 Load = 2660.20/6		6	167			1002	443.367	444253.40
								Total Construction Cost	444253.40
								12% GST	53310.41
								Sub Total	497563.81

ADMINISTRATIVE APPROVAL
Accorded For Rs. Five lakhs only
Head of A/c. P-3293
Div. Ref. No. 48 Date 01/02/19
AE
EE(BTP)

TECHNICAL SANCTION
Accorded For Rs. Five lakhs only
Head of A/c. P-3293
Div. Ref. No. 78 Date 01/02/19
AE
EE(BTP)

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
					Miscellaneous and rounding off				2436.19
		(Rs. Five lakhs only)						Total	500000.00

Certificate:

1 *Certified that I have personally inspected the area and prepared the estimate.*

2 *Certified that the work proposed in this estimate is not included in any other scheme.*

3 *Certified that the estimate is prepared as per Approved BWSSB Rates and PWD SR 2018-2019*

Assistant Engineer ***Assistant Executive Engineer***

Executive Engineer
Bruhat Bangalore Mahanagara Palike
Byatarayanapura Division

BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

BYATARAYANAPURA DIVISION

KODIGEHALLI SUB DIVISION

Name of the Work :- Suppy of Water through Water Tanker at Balaji Layout and Bhadrappa Layout at Kodigehalli in Ward no 08

Eatimated Cost : 5.00 Lakhs

Job Code : 008-19-000017

BRUHAT BANGALORE MAHANAGARA PALIKE

Name of Work: Suppy of Water through Water Tanker at Balaji Layout and Bhadrappa Layout at Kodigehalli in Ward no 08

			JOB CODE				008-19-000017		
			Estimate Cost:				500000.00		
Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
a	Supply of Drinking Water through water tankers of Capacity 6000 Liters Hiring of Water Tanker (Page No. XLVIII, Code No. 1032) PWD SR 2018-2019 For 3000 Liter Capacity = 412 /2= 206	per day	1				1	206.00	206.00
b	2) Hiring of Tractor 40HP P XXXXVI / I No. 19, Code No 1023, PWD SR 2018-2019	per day	1				1	1288.00	1288.00
c	**Water 40.00 / KL (S.L No 745, Code No 0818).** For 6KL= 6X40=240 Procurement of Water -- Rs. 240.00/ Load (6000 Liters). Considering 3000 Liters cost is =240/2 Rs.120.00/Load Considering 5 Loads/Day 6X120.00=720	Per Load	6				6	120.00	720.00
d	Engaging Causal Labours (Unskilled mazdoor Heavy) (PWD SR 2018-2019 Page No. LIV / I. 5)		1				1	446.20	446.20
	Subtotal for 6 loads								2660.20
1	Consider 6 Loads / Day for 167 Days 6 X 165 = 1002 Loads x Rs. 443.37 = For 1 Load = 2660.20/6		6	167			1002	443.367	444253.40
								Total Construction Cost	444253.40
								12% GST	53310.41

ADMINISTRATIVE APPROVAL
Accorded For Rs. Five lakhs only
Head of A/c. P-3293
Div. Ref. No. 48 Date 01/02/19
AE
EE(BTP) 01/02

TECHNICAL SANCTION
Accorded For Rs. Five lakhs only
Head of A/c. P-3293
Div. Ref. No. 78 Date 01/02/19
AE
EE(BTP) 01/02

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
								Sub Total	497563.81
							Miscellaneous and rounding off		2436.19
		(Rs. Five lakhs only)						Total	500000.00

Certificate:

1 *Certified that I have personally inspected the area and prepared the estimate.*

2 *Certified that the work proposed in this estimate is not included in any other scheme.*

3 *Certified that the estimate is prepared as per Approved BWSSB Rates and PWD SR 2018-2019*

Assistant Engineer

Assistant Executive Engineer

Executive Engineer
Bruhat Bangalore Mahanagara Palike
Byatarayanapura Division

BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

BYATARAYANAPURA DIVISION

KODIGEHALLI SUB DIVISION

Name of the Work :- Improvments to Parks in Kodigehalli Ward No 08

Eatimated Cost : 5.00 Lakhs

Job Code : 008-19-000015

BRUHAT BANGALORE MAHANAGARA PALIKE

Name of Work: Improvements to Parks in Kodigehalli Ward No 08

b Code:- 008-19-000015

Estimate cost-5.00 Lakhs

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
1	KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.143, I.No.19.1 of PW, P&IWTD SR 2018-19)								
	In 9th mn rd Park	Cum							
	Pargola								
	Platform		1	16.80	0.40	0.30	2.02		
	For Post Footings		6	0.50	0.50	0.30	0.45		
							2.47	252.49	**622.65**
	A.Basic rate	**130.00**							
	B.Loading and unloading with 20km lead= 57+2.0x1.28x20 = 108.2	**108.20**							
	C (Area Weightage 6%)	**14.29**							
	Total	**252.49**							
2	KSRB 4-1.2: Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.892 cum and fine aggregates @ 0.465 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.13, I.No.4.2 of PW,P&IWTD S.R 2018-19)								
	Bed Concrete	Cum							
	In 9th mn rd Park								
	Pargola								
	Platform		1	16.80	0.40	0.15	1.01		
	3.1412*5.4*5.4/4=22.9		1	22.90		0.15	3.43		
	For Post Footings		6	0.50	0.50	0.10	0.15		
							4.59	5505.64	**25270.89**
	A.Basic rate	**5194.00**							
	B.Area Weightage 6%	**311.64**							
	Total	**5505.64**							
3	KSRB 5.3-3 : Providing and constructing granite / trap / basalt size stone masonry in basement with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13(P.No.25, I.No.5.6 of PW, P&IWTD S.R 2018-19)								
	In 9th mn rd Park	Cum							
	Pargola								
	Platform		1.00	16.80	0.60	0.45	4.54		
							4.54	4871.76	**22098.30**
	A.Basic rate	**4596.00**							
	B.Area Weightage 6%	**275.76**							
	Total	**4871.76**							
4	KSRB 15.1.1 Providing flush pointing to square rubble, course or uncoursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. (P.No.115, I.No.15.1 of PW, P&IWTD S.R 2018-19)								
	In 9th mn rd Park	Sqm							
	Pargola								
	Platform		1.00	16.80		0.45	7.56		
							7.56	149.46	**1129.92**
	A.Basic rate	**141.00**							
	B.Area Weightage 6%	**8.46**							
	Total	**149.46**							

	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
5	KSRB 4-1.5 : Providing and laying in position plain cement concrete of mix M20 with OPC cement @ 300kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and fine aggregates @ 0.43 cum, machine mixed, concrete laid in layers not exceeding 15cms thick well compacted, in foundation and plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications.(P.No.13, I.No. 4.5 of PWD SR 2018-19)								
	For Floor	Cum							
	In 9th mn rd Park								
	Pargola								
	Platform		1	22.90		0.10	2.29		
	For Post Footings		6	0.50	0.50	0.50	0.75		
							3.04	5647.68	17168.58
	A.Basic rate	**5328.00**							
	B.Area Weightage 6%	**319.68**							
	Total	**5647.68**							
6	KSRRB M300-53. Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300- 2 complete as per specifications, (which includes cost of gravel / murrum, watering charges & compaction by vibratory roller) MORTH Specification No. 305 (P.No.147, I.No.19.60 of PW,P&IWTD S.R 2018-19)								
	Floor Filling	Cum							
	In 9th mn rd Park								
	Pargola								
	Platform		1.00	22.90		0.10	2.29		
							2.29	344.50	788.91
	A.Basic rate	**325.00**							
	B.Area Weightage 6%	**19.50**							
	Total	**344.50**							
7	Providing and making precast seating arrangement including excavation laying pcc M15, providing laying M20 concrete for pedestal and seating slab, fixing of seating slab including all necessary bolt and nuts etc, complete and as per the directions of Engineer in-Charge. (Data Rate)								
	Benches	Each	1	10.00	--	--	10.00	11785.00	117850.00
	Data Rate	**11785.00**							
8	KSRB 5-11 : Providing and constructing load bearing wall with solid concrete blocks of size 400x200x200 mm having block density not lessthan 1800 kg/m3 and having a minimum average compressive strength 5.00 N/mm2 confirming to IS 2185 (Part) : 2005 and constructed with CM 1:4 , as per IS 2572:2005 including cost of all materials, labour charegs, scaffolding, curing complete as per specifications. KBS No.5.4 (P.No.27 I.No.5.27.1 of PW,P&IWTD SR of 2018-19)								
	In 9th mn rd Park	Sqm							
	Pargola								
	Platform		1	16.80	--	0.6	10.08		
							10.08	966.72	9744.54
	Basic rate	**912.00**							
	Area Weightage 6%	**54.72**							
	Final Rate	**966.72**							
9	KSRB15-3.9 :Providing 18mm thick cement plaster in single coat with cement mortar 1:6, to brick masonry including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications.(P.No.116 I.No.15.17 of PW,P&IWTD SR of 2018-19)								
	In 9th mn rd Park	Sqm							
	Pargola								
	Platform		1	16.80	--	0.3	5.04		
							5.04	259.70	1308.89
	Basic rate	**245.00**							
	Area Weightage 6%	**14.70**							
	Final Rate	**259.70**							

ADMINISTRATIVE APPROVAL
Accorded For Rs. Five lakh only
Head of A/c. P-3292
Div. Ref. No. 47 Date 01/02/19
AE
EE(BTP)

Sl. No.	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
							5.04	259.70	1308.89
	Basic rate	**245.00**							
	Area Weightage 6%	**14.70**							
	Final Rate	**259.70**							
10	*Fabricating, supplying & erecting M.S. angular Truss for all spans as approved design and drawing. The entire truss is anchored suitably by using 4 Nos. of M.S. anchor bolts at each support, with base plate and shoe plate.The work includes cutting, straightening, placing in position of M.S angle and wleding wherever necessary, and applying one coat of red oxide primer coat to all the members including cost of all materials, labour charges, & hire charges of machineries for cutting, welding, grinding & erection equipments, etc., complete as per specification. (Page No. 43 Item No. 7.30 of CSR 2018-19).*								
	In 9th mn rd Park	*kgs*							
	Pargola								
	6 No 150mm dia Hollow Circular Pipes		*6*	*3.00*	*--*	*--*	*18.00*		
	at 18.9 kg/m			*18.90*			*340.20*		
	Main members								
	65mmX100mmX6mm		*12*	*4.00*	*--*	*--*	*48.00*		
	at 15 kg/m			*15.00*			*720.00*		
	65mmX100mmX6mm		*1*	*15.50*	*--*	*--*	*15.50*		
	at 15 kg/m			*15.00*			*232.50*		
	Purlins								
	30mmX50mmX3mm		*12*	*8.50*	*--*	*--*	*102.00*		
	at 3.6 kg/m			*3.60*			*367.20*		
							1659.90	*135.68*	***225215.23***
	Basic rate	**128.00**							
	Area Weightage 6%	**7.68**							
	Final Rate	**135.68**							
11	*Supplying and fixing new Mangalore tiles on existing reepers. (P.No.267, I.No.37.9 of PWD SR 2018-19)*								
	Mangalore Tiles	*Sqm*							
	In 9th mn rd Park								
	Pargola		*1*	*8.50*	*--*	*4.00*	*34.00*		
							34.00	*431.42*	***14668.28***
	Basic rate	**407.00**							
	Area Weightage 6%	**24.42**							
	Final Rate	**431.42**							
12	*KSRRB M800-7. Painting:-Providing and applying two coats of ready- mix paint of approved brand after through cleaning of surface to give an even shade complete as per specifications. MORTH Specification No. 803 Painting on Steel Surface(P.No.181, I.No24.8.1 of PW,P&IWTD S.R 2018-19))*								
	In 9th mn rd Park	*Sqm*							
	Pargola								
	Circular Posts		*6*	*0.52*	*--*	*2.50*	*7.82*		
	65mmX100mmX6mm		*12*	*0.33*	*--*	*4.00*	*15.84*		
	65mmX100mmX6mm		*1*	*0.33*	*--*	*15.50*	*5.12*		
	30mmX50mmX3mm		*12*	*0.16*	*--*	*8.50*	*16.32*		
							45.10	*76.32*	***3441.77***
	Basic rate	**72.00**							
	Area Weightage 6%	**4.32**							
	Final Rate	**76.32**							
							Total Construction Cost		***439307.96***
13							***12% GST to Construction Cost***		***52716.96***
14								***Sub Total***	***492024.92***

TECHNICAL SANCTION
Accorded For Rs. Five lakh only
Head of A/c. P-3292
Div. Ref. No. 77 Date 01/02/19
AE
EE(BTP)

Sl. No.	Description of work	Unit	No.	Length	Breadth	Depth	Quantity	Rate in Rs.	Amount in Rs.
				m	m	m			
							Miscellaneous and rounding off		7975.08
15								Total	500000.00

Certificate.

1 *The rates adopted based on the, BWSSB SR 2017-18, PRED SR 2012-13, RWS SR 2012-13, KPWD Electrical SR 14-15, PWD SR. Bangalore circle for year 2018-19.*
2 *The provisions made in the estimate are necessary and essential.*
3 *The workspot was inspected and work is found to be necessary.*
4 *The area comes within the Bruhat Bangalore Mahanagara Palike limits.*

Assistant Engineer

Executive Engineer

Assistant Executive Engineer

BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

BYATARAYANAPURA DIVISION

KODIGEHALLI SUB DIVISION

Name of the Work : Improvements of Roads and Desilting at Devinagar and Surrounding area at Kodigehalli Ward No.8.

Eatimated Cost : 15.00 Lakhs

Job Code : 008-19-000021

Bruhat Bangalore Mahanagara Palike

Name of Worke: Improvements of Roads and Desilting at Devinagar and Surrounding area at Kodigehalli Ward No.8.

Job C[illegible]e:- 008-19-000021

Est Cost= 15.00Lakhs

Sl. No.	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
1	KSRRB 300-1. **Earthwork excavation** by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete asper specifications.MORTH / Chapter 3(I No-19.1, P No-143)								
	Devinagar								
	4th Cross Road @ Axies Bank ATM		2	101.00	1.10	0.85	188.87		
	Over Burden Earth		5	3.00	1.00	0.30	4.50		
			4	5.00	1.00	0.40	8.00		
			5	4.00	1.00	0.35	7.00		
		Cum					**208.37**	**252.49**	**52,611.76**
	A.Basic rate		**130.00**						
	B.Loading and unloading with 20km lead= 57+2.0x1.28x20		**108.20**						
	C (Area Weightage 6%)		**14.29**						
	Total		**252.49**						
2	KSRB 4-1.2 : Providing and laying in position **plain cement concrete of mix 1:3:6** with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms^thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications.Specification No. KBS 4.1, 4.2.(P.No-13,I No-4.2)								
	Devinagar								
	4th Cross Road @ Axies Bank ATM		2	101.00	1.10	0.10	22.22		
		Cum					**22.22**	**5505.64**	**122335.32**
	Basic rate		**5194.00**						
	6.00% AW		**311.64**						
	Sub Total		**5505.64**						
3	KSRB 4-6.4 : Providing and **removing centering, shuttering,** strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specificaitons. Specification No. KBS 4.6.2(I No-4.31,P No-16)								
	Devinagar								
	4th Cross Road @ Axies Bank ATM	4	2	101.00		0.60	484.80		
		Sqm					**484.80**	**379.48**	**183971.90**
	Basic rate		**358.00**						
	6.00% AW		**21.48**						
	Sub Total		**379.48**						
4	KSRB 4.2.2 : Providing and laying in position reinforced cement concrete of design mix M20 with OPC cement @ 320kgs, with 20mmand down size graded granite metal coarse aggregates @0.0.69cum and fine aggregtes @ 0.460cum, with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation plinth and ground floor level for roof slabs, staircase, lintles, retaining walls, return walls, walls (any thickness) including attached plasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc., including cost of all materials, labour, HOM of machinery, curing, complete as per specifications. Specification No. KBS 4.1, 4.6(I No-4.11,P No-14)								
	Devinagar								
	Raft								

	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
	4th Cross Road @ Axies Bank ATM		2	101.00	0.90	0.15	27.27		
	Devinagar								
	Side wall								
	4th Cross Road @ Axies Bank ATM		4	101.00	0.15	0.60	36.36		
		Cum					**63.63**	**5998.54**	**381687.10**
	Basic rate		**5659.00**						
	6.00% AW		**339.54**						
	Sub Total		**5998.54**						
5	*KSRB 4.9.2 :* ***Providing T.M.T steel reinforcement*** *for R.C.C workincluding straightening, cutting, bending, hooking, placing in position,lapping and / or welding wherever required, tying with binding wire andanchoring to the adjoining members wherever necessary complete asper design (laps, hooks and wastage shall not be measured and paid)cost of materials, labour, HOM of machinery complete as perspecifications.Specification No. KBS 4.6.3(I No-4.46.2,P No-18)*								
	Consider 50kg/Cum drain		1	63.63	50.00		3181.50		
		Tonne					3.18		
		Tonne					3.18	**75223.96**	**239325.03**
	Basic rate		**70966.00**						
	6.00% AW		**4257.96**						
	Sub Total		**75223.96**						
6	*Providing and Fixing* ***pre cast covering Slab*** *made out of CC 1:2:4 with 10cm thick and Finishing cutting ,including form work,curing,including cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc ,copmplete. (Data Rate)*								
	For CC Drain Top Covering Slab								
	Devinagar								
	4th Cross Road @ Axies Bank ATM		2	106.00	0.90		190.80		
		Sqm					**190.80**	**1873.00**	**357368.40**
	Data Rate		**1873.00**						
								Total Construction Cost	**1337299.51**
								12% GST	**160475.94**
								Sub Total	**1497775.45**
								Miscellaneous and rounding off	**2224.55**
								Total	**1500000.00**

TECHNICAL SANCTION
Accorded For Rs. Fifteen Lakh only
Head of A/c Qty Ltd to P-3296
Div. Ref. No. 98/18-19 Date 01/02/19
AE EE(BTP) 1/2/19

Certificate

1. *The workspot was inspected and works is found to be necessary.*
2. *The area comes within the Bruhat Bangalore Mahanagara Palike limits.*
3. *The rates adopted based on the PWD SR,Bangalore circle for year 2018-2019.and Data Rates*

Assistant Engineer

Executive Engineer,

Asst. Executive Engineer,

Administrative Approval
Accorded For 15.00 Lakhs
Head of A/C P3296
CER NO :168 Dt: 09/1/2019

TA CE (YNK)

BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

BYATARAYANAPURA DIVISION

KODIGEHALLI SUB DIVISION

Name of the Work : Providing and Fixing CCTV on Black Spot in Kodigehalli Ward No.8

Eatimated Cost : 15.00 Lakhs

Job Code : 008-19-000022

BRUHAT BANGALORE MAHANAGARA PALIKE

Name of Work: Providing and Fixing CCTV on Black Spot in Kodigehalli Ward No.8

Job Code:- 008-19-000022

Estimate Cost: 15.00 Lakhs

Sl. No	Description of Work	Unit	No	Length m	Bredth m	Depth m	Qty.	Rate	Amount
1	Supplying ,installation ,Commissioning and Testing CP PLUS 3 MP , 50 meters ip bullet camera,1/3" 3MP PS CMOS Image Sensor,Max 25fps@3MP, 25/30fps@1080P,H.264, H.264H, H.264B , MJPEG dual-codec encoding,DWDR, Day/Night(ICR), 3DNR, ROI, AWB, AGC, BLC, HLC,3.6mm fixed lens (6mm optional),IR Range of 50 Mtrs, IP67, SD Card, PoE,Mobile Software: iCMOB, gCMOB,CMS Software: KVMS Pro, vOptimus Pro inclusive of all taxes and transportation charges as per the direction of Engineer in Charge								
	Approved Data Rate	22160.00							
		Nos	10				10.00		
							10.00	22160.00	**221600.00**
2	Supplying ,installation ,Commissioning and Testing CP PLUS 32 Ch. H.265 4K Network Video Recorder Up to 32 channel IP camera input H.265/H.264 dual codec decoding Up to 8Mp resolution preview and playback Max 200Mbps incoming bandwidth Support 4 SATA HDDs up to 24TB, 2 USB(1 USB3.0) HDMI / VGA simultaneous video output Support Multi-brand network cameras ONVIF Version 2.4 conformance Mobile Software: iCMOB, gCMOB inclusive of all taxes and transportation charges as per the direction of Engineer in Charge								
	Approved Data Rate	65892.00							
		Nos	1				1.00		
							1.00	65892.00	**65892.00**
3	Supplying ,installation ,Commissioning and Testing Netgear ReadyNAS 4-Bay Diskless Network Attached Storage for Personal Cloud by Netgear inclusive of all taxes and transportation charges as per the direction of Engineer in Charge								
	Approved Data Rate	256420.00							
		Nos							
			1				1.00		
							1.00	256420.00	**256420.00**
4	Providing and Supplying NAS hard disk drives 6 TB inclusive of all taxes and transportation charges as per the direction of Engineer in Charge								
	Approved Data Rate	23850.00							
		Nos	1				1.00		
							1.00	23850.00	**23850.00**
5	Supplying ,installation ,Commissioning and Testing D-Link 8-Port Gigabit Switch With 2 Combo SFP Ports inclusive of all taxes and transportation charges as per the direction of Engineer in Charge								
	Approved Data Rate	27500.00							
		Nos	1				1.00		
							1.00	27500.00	**27500.00**
6	Providing and Fixing Media converter Giga Dlink inclusive of all taxes and transportation charges as per the direction of Engineer in Charge								
	Approved Data Rate	11200.00							
		Nos	1				1.00		
							1.00	11200.00	**11200.00**
7	Providing and Fixing OFC cable single mode 6 core inclusive of all taxes and transportation charges as per the direction of Engineer in Charge								
	Approved Data Rate	165.00							
		m	2935				2935.00		
							2935.00	165.00	**484275.00**
8	Providing and Fixing Electrical work for boxes for power supply, fixing PVC Boards with three pin socktes and switches with protection MCB and cabling to street light electrical poles as per the direction of Engineer in Charge								
	Approved Data Rate	7500.00							
		Nos	1				1.00		
							1.00	7500.00	**7500.00**
9	Providing Cctv MS poles with camera fixing brackets, 5 to 6 mtr height Box inclusive of all taxes and transportation charges as per the direction of Engineer in Charge								
	Approved Data Rate	23500.00							
		Nos	4				4.00		
							4.00	23500.00	**94000.00**
10	Providing and Fixing MS Boxes for Poles with rust proof powder coating Box inclusive of all taxes and transportation charges as per the direction of Engineer in Charge								
	Approved Data Rate	8500.00							
		Nos	4				4.00		
							4.00	8500.00	**34000.00**
11	Providing and Fixing Electrical work for boxes for power supply, fixing PVC Boards with three pin socktes and switches with protection MCB and cabling to street light electrical poles as per the direction of Engineer in Charge								

Sl. No	Description of Work	Unit	No	Length m	Bredth m	Depth m	Qty.	Rate	Amount
	Approved Data Rate	7500.00							
		Nos	4				4.00		
							4.00	7500.00	**30000.00**
12	Providing Internet charges connecting CCTV with IP Based for one month								
	Approved Data Rate	3000.00							
		Nos	1				1.00		
							1.00	3000.00	**3000.00**
13	Supplying ,installation ,Commissioning and Testing of 43" LED TV – Reputed make Sony/Samsung/LG inclusive of all taxes and transportation charges as per the direction of Engineer in Charge								
	Approved Data Rate	44000.00							
		Nos	1				1.00		
							1.00	44000.00	**44000.00**
14	Supplying ,installation ,Commissioning and Testing Server rack 15u Box inclusive of all taxes and transportation charges as per the direction of Engineer in Charge								
	Approved Data Rate	34500.00							
		Nos	1				1.00		
							1.00	34500.00	**34500.00**
15								**Total Construction Cost**	**1337737.00**
16								**12% GST**	**160528.44**
								Sub Total	**1498265.44**
								Miscellaneous and rounding off	**1734.56**
								Total	**1500000.00**

Certificate:

1 *The work spot has been inspected and the work is found necessary.*
2 *This estimate is prepared as per Approved Rates.*
3 *The provisions were made in this estimate are necessary and adequate.*
4 *This works come under B.B.M.P. limits.*

Assistant Engineer

Executive Engineer

Assistant Executive Engineer

Administrative Approval
Accorded For ..15.00 Lakhs
Head of A/C.....P.3298
CER NO :.....170..... 09/01/2019

TA CE (YNK)

TECHNICAL SANCTION
Accorded For Rs..Fifteen lakhs only.....
Head of A/c.....P-3298.....
Div. Ref. No.....99.....Date..01/02/19...
AE 01/02
EE(BTP) 01/02